

# UNITED STATES PARTMENT OF COMMERCE

Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. APPLICATION NO. 09/335,376 06/17/99 LIM Ĵ. 01997/253005 **EXAMINER** LM02/0111 G ROGER LEE ESQ CMITS PAPER NUMBER **ART UNIT** FISH & RICHARDSON PC 225 FRANKLIN STREET BOSTON MA 02110-2804 2741 DATE MAILED: 01/11/00

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

# Office Action Summary

Application No. 09/335,376

Applicant

Jae S. Lim

Examiner

**Talivaldis Ivars Smits** 

Group Art Unit 2741



X Responsive to communication(s) filed on <u>Jun 17, 1999</u>	
☐ This action is <b>FINAL</b> .	
Since this application is in condition for allowance except for formal matters, in accordance with the practice under Ex parte Quay@35 C.D. 11; 453 O.G. 213.	as to the merits is closed
A shortened statutory period for response to this action is set to expire month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).	
Disposition of Claim	
	is/are pending in the applicat
Of the above, claim(s) <u>10, 17, 22, 24-27, 36, 51-53, 56, 65, 73, 78, 82-84, 89-95</u> is/ar	e withdrawn from consideration
	is/are allowed.
X Claim(s) 9, 11-16, 18-21, 23, 28-35, 37-50, 54, 55, 57-64, 66, 68-72, 74-77, 79-81, 85-88,	is/are rejected.
☐ Claim(s)	is/are objected to.
Claims are subject to restriction or election requirement.	
Application Papers  See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.  The drawing(s) filed on is/are objected to by the Examiner.  The proposed drawing correction, filed on is approved disapproved.  The specification is objected to by the Examiner.  The oath or declaration is objected to by the Examiner.  Priority under 35 U.S.C. § 119  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  AllSome*	
Attachment(s)  Notice of References Cited, PTO-892	
✓ Information Disclosure Statement(s), PTO-1449, Paper No(s).	
☐ Interview Summary, PTO-413	
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948	
☐ Notice of Informal Patent Application, PTO-152	
SEE OFFICE ACTION ON THE FOLLOWING PAGES	

Art Unit: 2741

#### **DETAILED ACTION**

# Reissue Application

1. The instant application, filed June 17, 1999, was submitted for a reissue of U.S. Patent 5,640,486, filed November 28, 1994 and issued June 17, 1997, applicant having added new claims 9-153 thereto. A Preliminary Amendment, filed November 5, 1999, has canceled claims 10, 17, 22, 24-27, 36, 51-53, 56, 65, 73, 78, 82-84, 89-95, 98, 103-105, 110-115, 121, 127, 132, and 138, as well as amended claims 69, 71, 74-77. 79-81, 85, 96, 99-102, 106, and 107.

### Oath/Declaration

2. The reissue oath/declaration filed with this application is defective because it fails to identify at least one error which is relied upon to support the reissue application. See 37 CFR 1.175(a)(1) and MPEP § 1414.

The error listed in the declaration, "filing claims directed to subject matter that was narrower than I had a right to claim", is too vague and indefinite. Applicant should indicate how claims were (or at least one claim was) unnecessarily narrowed.

## Improper Recapture

3. All of the new claims 9, 11-16, 18-21, 23, 28-35, 37-50, 54, 55, 57-64, 66-72, 74-77, 79-81, 85-88, 96, 97, 99-102, 106-109, 116-120, 122-126, 128-131, 133-137, and 139-153 are rejected under 35 U.S.C. 251 as being an improper recapture of claimed subject matter

Art Unit: 2741

rejected under 35 U.S.C. 251 as being an improper recapture of claimed subject matter deliberately canceled in the application for the patent upon which the present reissue is based. As stated in *Ball Corp.* v. *United States*, 221 USPQ 289, 295 (Fed. Cir. 1984):

The recapture rule bars the patentee from acquiring, through reissue, claims that are of the same or broader scope than those claims that were canceled from the original application.

Page 3

Thus, applicant **cannot** acquire, through reissue, claims that are the same or broader

- than claims canceled or amended from the original application (except for claims
  materially narrower in an aspect germane to a prior art rejection made in the original
  application but broader in an aspect unrelated to the rejection), or
- in an aspect germane to a prior art rejection even though narrower in another aspect unrelated to the rejection.

The rejected claims are broader in an aspect germane to a prior art rejection by *failing to recite*more narrow versions of any of the following **limitations**, listed next (in paraphrased form) under
the respective Patent and Application number pairs, at least one of which limitations was needed
for the allowability of every one of the allowed independent claims in said, parent and related
continuing, applications, as indicated by their prosecution history:

# U.S. Patent 5,394,508 (appl. 07/822,247)

• Quantizing only once the magnitude of the yardstick signal element of each band, it being the signal element having the largest magnitude in the respective band {issued claims 1 and 13; original claim numbers 13 and 27, respectively}.

Application/Control Number: 09/335,376 Page 4

Art Unit: 2741

• More preferential bit allocation to a selected signal element if its location is between that of the yardstick signal element (defined, in general, as being of preselected size relative to the other signal elements in its band) and a selected end of the band, rather than being elsewhere {issued claim 8; original claim number 5}.

- Less accurate nonuniform quantization of a non-yardstick signal element, based on the sign of the yardstick element {issued claims 9 and 12; original claim numbers 7 and 22}.
- Specifying a plurality of non-yardstick signal element quantization levels to be within a range of less than the yardstick element magnitude if the yardstick element has positive amplitude; if negative, making the quantization level range less than twice said magnitude {issued claim 11; original claim number 12}.
- Specifying the location of respective yardstick signal elements with respect to at least one dimension within its band as well as the respective sign of the yardstick elements, and accurately quantizing said magnitudes, locations and signs for coding {issued claim 14; original claim number 41}.

### U.S. Patent 5,369,724 (appl. 07/879,635)

• Having the magnitude of at least one of the yardstick signal elements (chosen on the basis of its preselected size relative to the other signal elements in its band) be closest to the median of the magnitudes of all the signal elements in its band {issued claim 1; original claim number 6}.

Art Unit: 2741

• Having the magnitude of at least one of the yardstick signal elements (chosen on the basis of its preselected size relative to the other signal elements in its band) be closest to the average of the magnitudes of all the signal elements in its band {issued claim 2; original claim number 7}.

- Two-stage quantization of at least one yardstick signal element, and encoding its magnitude and location within its band {issued claim 3; original claim number 8}.
- Quantizing a signal element (of preselected size relative to other signal elements therein) in a band (of preselected size relative to other signal elements therein) as a function of at least two yardstick signal elements {issued claim 4; original claim number 9}.
- Encoding the sign of of at least one yardstick signal element for which the location has been encoded {issued claim 5; original claim number 10}.
- Quantizing the magnitude of at least one yardstick signal element for which the location was encoded and of at least one additional yardstick signal element, selecting a non-yardstick signal element in a band for which said location was encoded, allocating bits for the latter as a function of the quantized magnitudes of the at least two yardstick signal elements, the signal decoder translating the code based on said signal element bit allocation {issued claim 6; original claim number 12}.
- Encoding the location of at least one yardstick signal element with respect to its position along at least one dimension in which said signal elements are discrete within its respective band {issued claim 10; original claim number 16}.

Page 5

Art Unit: 2741

• Quantizing the magnitudes of at least one yardstick signal element with encoded location and at least an additional yardstick element, selecting a non-yardstick signal element from the band containing encoded location yardstick and quantizing it as function of the quantized magnitudes of said at least two quantized yardsticks {issued claim 11; original claim number 19}.

Page 6

## U.S. Patent 5,640,486 (appl. 08/345,879)

• Coding of yardstick signal element location relative to the non-yardstick elements and sending that information with the encoded signal for decoding, further using the specific location data for perceptual coding and for decoding {from Indication of Allowable Subject Matter for issued claims 1, 6, 7, and 8; original claim numbers 1, 11, 17, and 18, respectively}

### Claim Objections

4. Claim 78 is objected to because of the following informalities: It recites a dependence on canceled claim 84. Appropriate correction of the dependence is required.

### Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner, Talivaldis Ivars Smits, whose telephone number is (703) 306-3011. The examiner can normally be reached Mondays-Fridays from 8:00 a.m. to 4:30 p.m.

Art Unit: 2741

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

David R. Hudspeth, can be reached on (703) 308-4825. The facsimile phone number for this Art

Unit is (703) 305-9508.

Any inquiry of a general nature or relating to the status of this application should be

directed to the Technology Center 2700 receptionist, whose telephone number is (703) 305-3900

Dr. Talivaldis Ivars Smits Patent Examiner Art Unit 2741 January 7, 2000

DAVID R. HUDSPETH SUPERVISORY PATENT EXAMINER GROUP 2700

Noul R M

Page 7